



PATENT APPLICATION

DEF/REF #307

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Horikoshi MAMORU et al

Appln. No.: 09/508,418

Group Art Unit: 1652

Filed: June 8, 2000

Examiner: Steadman, D.

For: NOVEL PROTOPORPHYRINOGEN OXIDASE TOLERANT
TO PHOTOBLEACHING HERBICIDE

REQUEST FOR REFUND

Assistant Commissioner
of Patents
Washington, D.C. 20231

Sir:

Applicants hereby respectfully request a refund in the amount of \$390.00, for the above-identified application.

Specifically, on April 11, 2001, Applicants filed an Election in response to the Office Action (Restriction Requirement) of January 11, 2001 (Paper No. 10), for which reply was due within the indicated response time of three months (a copy of the Action and date-stamped mailroom receipt is attached hereto). Therefore, Applicants did file a timely response.

However, Applicants' Deposit Account was charged the fee for a two-month's extension of time, i.e., in the amount of \$390.00, as indicated on the Monthly Statement of Deposit Account dated April 30, 2001 (a copy of which is attached hereto).

Hence, Applicants timely filed a response to the Official Action of January 11, 2001, and no extensions of time were needed. Therefore, Applicants respectfully request that a refund (in the amount of \$390.00) be restored to Deposit Account No. 19-4880. A duplicate copy of this paper is attached for such purpose.

Respectfully submitted,


Drew Hissong
Registration No. 44,765

SUGHRUE, MION, ZINN,
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Date: July 18, 2001



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

MONTHLY STATEMENT
OF DEPOSIT ACCOUNT

To replenish your Deposit Account, detach and return top portion with your check. Make check payable to Commissioner of Patents & Trademarks.

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Washington, D.C. 20231

Account No.
194880
Date
4-30-01
Page
3

SUGHRUE MION ZINN MACPEAK & SEAS

FINA

2100 PENNA AVE N W
SUITE 800
WASHINGTON DC 20037

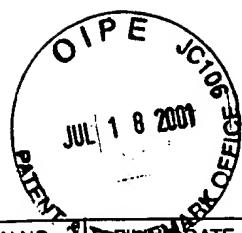
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DATE POSTED			CONTROL NO.	DESCRIPTION (Serial, Patent, TM, Order)	DOCKET NO.	FEE CODE	CHARGES/ CREDITS	BALANCE
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4	12	01	1	09497516	Q57818	102	160.00	45114.82
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AN AMOUNT SUFFICIENT TO
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Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	RECEIVED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/508,418 06/08/00 HIRI KOSHI M 058140

HM12/0111

EXAMINER

SUGHRUE MION ZINN
MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20037

KRUSE, D

ART UNIT

PAPER NUMBER

1638

DATE MAILED:

01/11/01

RECEIVED
JAN 12 2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

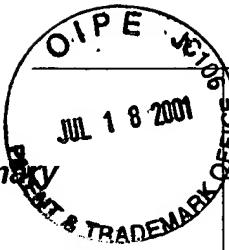
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Office Action Summary

Applicant's Copy

 Office Action Summary	Application No.	Applicant(s)
	09/508,418	HORIKOSHI ET AL.
 EXAMINER & TRADEMARK OFFICE	Examiner	Art Unit
	David H Kruse	1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____ .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) _____ is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). _____
16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 20) Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-8, drawn to a protoporphyrinogen oxidase or a mutant peptide having protoporphyrinogen oxidase activity that is tolerant to a photobleaching herbicide.

Group II, claim(s) 9-26, drawn to a gene encoding a protoporphyrinogen oxidase or a mutant peptide having protoporphyrinogen oxidase activity that is tolerant to a photobleaching herbicide, a recombinant vector comprising said gene and a transformant produced by said vector.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Modified forms of the protoporphyrinogen oxidase enzyme that are tolerant to a photobleaching herbicide were known in the art at the time of Applicant's invention (see WO 97/32011, Volrath et al, abstract only). Thus, under PCT Rule 13.2 there is no special technical feature among the inventions nor a single inventive concept as required under PCT Rule 13.1.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (703) 306-4539. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

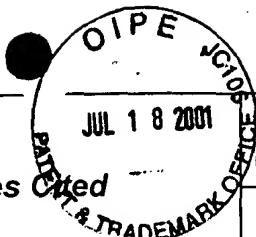
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Paula Hutzell can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4242 or (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1234.



AMY J. NELSON, PH.D
PRIMARY EXAMINER

David H. Kruse, Ph.D.
5 January, 2001



Notice of References Cited						Application/Control No. 09/508,418	Applicant(s)/Patent Under Reexamination HORIKOSHI ET AL.		
Examiner David H Kruse						Art Unit 1638	Page 1 of 1		
U.S. PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **		
							APS	OTHER	
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FOREIGN PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **	
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NON-PATENT DOCUMENTS									
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*A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)

**APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office

PTO-892 (Rev. 03-98)



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C12N 9/02, 15/82		A1	(11) International Publication Number: WO 97/32011 (43) International Publication Date: 4 September 1997 (04.09.97)									
<p>(21) International Application Number: PCT/US97/03313</p> <p>(22) International Filing Date: 27 February 1997 (27.02.97)</p> <p>(30) Priority Data:</p> <table> <tr> <td>60/012,705</td> <td>28 February 1996 (28.02.96)</td> <td>US</td> </tr> <tr> <td>60/013,612</td> <td>28 February 1996 (28.02.96)</td> <td>US</td> </tr> <tr> <td>60/020,003</td> <td>21 June 1996 (21.06.96)</td> <td>US</td> </tr> </table> <p>(71) Applicant (<i>for all designated States except US</i>): NOVARTIS AG [CH/CH]; Schwarzwaldallee 215, CH-4058 Basel (CH).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (<i>for US only</i>): VOLRATH, Sandra, L. [US/US]; 4225 Pine Oak Drive, Durham, NC 27707 (US). JOHNSON, Marie, A. [US/US]; 408 Heather Drive, Raleigh, NC 27606 (US). POTTER, Sharon, L. [US/US]; 3837 Whispering Branch Road, Raleigh, NC 27613 (US). WARD, Eric, R. [US/US]; 3003 Montgomery Street, Durham, NC 27705 (US). HEIFETZ, Peter, B. [US/US]; 3916 Sturbridge Drive, Durham, NC 27713 (US).</p> <p>(74) Agent: MEIGS, J., Timothy; 520 White Plains Road, Tarrytown, NY 10591-9005 (US).</p>		60/012,705	28 February 1996 (28.02.96)	US	60/013,612	28 February 1996 (28.02.96)	US	60/020,003	21 June 1996 (21.06.96)	US	<p>(81) Designated States: AU, BA, BB, BG, BR, BY, CA, CN, CU, CZ, FI, GE, GH, HU, JP, KG, KR, KZ, LC, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, TJ, UA, US, UZ, VN, YU, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>	
60/012,705	28 February 1996 (28.02.96)	US										
60/013,612	28 February 1996 (28.02.96)	US										
60/020,003	21 June 1996 (21.06.96)	US										
<p>(54) Title: DNA MOLECULES ENCODING PLANT PROTOPORPHYRINogen OXIDASE AND INHIBITOR-RESISTANT MUTANTS THEREOF</p> <p>(57) Abstract</p> <p>The present invention provides novel DNA sequences coding for plant protoporphyrinogen oxidase (protox) enzymes from soybean, wheat, cotton, sugar beet, grape, rice and sorghum. In addition, the present invention teaches modified forms of protox enzymes that are herbicide tolerant. Plants expressing herbicide tolerant protox enzymes taught herein are also provided. These plants may be engineered for resistance to protox inhibitors via mutation of the native protox gene to a resistant form or they may be transformed with a gene encoding an inhibitor-resistant form of a plant protox enzyme.</p>												